### Japan EPD Program by SuMPO

Sustainable Management Promotion Organization 14-8, Uchikanda 1-chome, Chiyoda-ku, Tokyo Japan https://ecoleaf-label.jp/

### Hitachi, Ltd. Hitachi Virtual Storage Platform E390H



with ISO/TS14067

□internal

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Б.	ınctional	Lunit

Per sales unit (per unit)

### System boundary

■ final products □intermediate products

### Main specifications of the product

All-Flash and Magnetic-Disc Array

- Controller chassis

HT-40SL-E390H, HT-40SL-E390EH

Up to 24 NVMe SSD

The suffix E means encryption model

Up to 1 unit

- Drive box

HT-F40SL-DBS((Up to 24 SAS SFF SSD/HDD) Independent verification of data & declaration in accordance

Up to 8 units

HT-F40SL-DBL (Up to 12 SAS LFF HDD)

Up to 8 units

HT-F40SL-DB60 (Up to 60 SAS LFF HDD)

Up to 8 units

\*The maximum installed drives represents

the case of connecting only a single type of drive box

The mix of the SAS/NVMe drive is excluded

- Assumed operating years : 5years

#### **Company Information**

Hitachi, Ltd.

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PCR number PA-520000-BF-01 PCR name IT equipment Publication date 3/18/2022 Verification date 3/4/2022 Verification method Product-by-product Verification# JV-BF-22008 Expiration date 3/3/2027 PCR review was conducted by: Approval date 2/19/2021 PCR review Ken Yamagishi panel chair Sustainable Management Promotion Organize Third party verifier*	Registration#	JR-BF-22008C			
Publication date 3/18/2022  Verification date 3/4/2022  Verification method Product-by-product  Verification# JV-BF-22008  Expiration date 3/3/2027  PCR review was conducted by:  Approval date 2/19/2021  PCR review Ken Yamagishi Sustainable Management Promotion Organize	PCR number	PA-520000-BF-01			
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, , , , , , , , , , , , , , , , , , , ,	PCR review	Ken Yamagishi			
Third party verifier*	panel chair	Sustainable Management Promotion Organizetion			
	Third party verifier*				
Yasuo Kozeki		Yasuo Kozeki			

\*Auditor's name is stated if system certification has been performed.

Registration number: JR-BF-22008C

■ external

<sup>\*</sup> The specifications listed are subject to change without notice due to product improvements.



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## 1. Quantification results, and contents of the declaration CFP quantification unit:

Parameter			Unit
CFP Quantification results		140,000	kg-CO₂eq
Breakdown	Raw material acquisition	4,900	kg-CO₂eq
	Production	2,300	kg-CO₂eq
	Distribution	80	kg-CO₂eq
	Use & maintenance	140,000	kg-CO₂eq
	End-of-Life	46	kg-CO₂eq
Value on CFP mark		140,000	kg-CO₂eq
Unit for the value on CFP mark		Per sales unit (per unit)	
Value on CFP mark		4.6	kg-CO₂eq/TB · Year
Unit for the value on CFP mark		Per TB · Year*1	

<sup>\*</sup>Quantification results may slightly differ from the sum of the breakdown due to rounding of fractions.

# 3. Supplementary environmental information

### 2. Additional information

- <Products>
- · Product Name: Hitachi Virtual Storage Platform E390H
- Conditions for calculating CO₂eq emissions:
   Calculated using 1 controller chassis (HT-40SL-E390H) with 24 NVMe SSDs installed.
   and 8 drive boxes (HT-F40SL-DBS) with the maximum installed of 192 SAS SSDs
- Product type name of the scenario used :
   Disk array (Solid State Drive(SSD) installed)
  - <Product main specifications>
    Storage capacity\*1 : 6,138TB
    Operating years\*2 : 5 years

Drive type: Solid State Drive (NVMe SSD, SAS SSD)

Drive interface : NVMe/SAS Installed drives : 216 units

 $\cdot$  CO2eq emissions :

-Per product: 140 t-CO<sub>2</sub>eq

-Per 1TB  $\cdot$  1Year : 4.6 kg-CO<sub>2</sub>eq/TB  $\cdot$  Year

- · Measurement conditions :
  - -Power during use is measured by the measurement method specified by certified PCR (PA-520000-BF-01)
- \*1 The capacity is calculated as 1TB = 1,000,000,000,000 bytes
- \*2 The operating years were assumed to be the statutory useful life(5 years for computer/others)

<sup>\*1</sup> The amount of  $CO_2$  emissions per unit function. Divided CFP results by the storage capacity (TB) and the assumed service life (Years).

### 4. Interpretation

- Greenhouse gas emissions at the use and maintenance stages are the largest, accounting for about 95% of the entire life cycle, and the influence of power consumption during use is large, so it can be said that energy-saving performance during use is a very important factor. Please note that the usage and maintenance stage may not be thesame as the customer's terms of use because general conditions have been set and evaluated.
- In calculating CFP, we use our data for the amount of raw materials used, but since it is difficult to collect data at the time of manufacturing thousands of parts, we use general data at the time of manufacturing raw materials. Therefore, it may not reflect the unique characteristics of this product.

### 5. Assumptions of secondary data used

IDEA V2.1.3 , complemented by CO2 Emissions Intensity v1.10.

### 6. Remarks

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- For data quantification, please refer to PCR and Rules on quantification and declaration.
- Comparative assertion is permitted only when Rules on quantification and declaration are satisfied. (Reference URL : https://ecoleaf-label.jp/regulation/)
- The CFP only addresses the single impact category of climate change and does not assess other potential social, economic and environmental impacts arising from the provision of a product.

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